

IN THE CLAIMS

Claims 1-6 (Cancelled).

7. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming solid-electrolyte layers on both sides of a positive electrode;

forming solid-electrolyte layers on both sides of a negative electrode;

laminating said positive electrode and said negative electrode such that one of said solid-electrolyte layers formed on said positive electrode and one of said solid-electrolyte layers formed on said negative electrode face each other;

winding said positive electrode and said negative electrode such that another one of said solid-electrolyte layers formed on said positive electrode and another one of said solid-electrolyte layers formed on said negative electrode face each other; and

subjecting said wound electrodes to heat treatment so that said solid-electrolyte layers formed on said positive electrode and said solid-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer.

8. (Currently Amended) A method of manufacturing a solid-electrolyte battery according to claim 7, wherein said solid-electrolyte layer contains swelling solvent, a matrix polymer, and is gelled.

9. (Original) The method of claim 7, wherein said wound electrodes are subjected to heat treatment at 70° C to 100° C.

10. (Original) The method of claim 7, wherein said wound electrodes are subjected to heat treatment for ten minutes.

11. (Currently Amended) The method of claim 8, wherein said solid-electrolyte salt is any layers comprise one of LiPF₆, LiAsF₆, LiBF₄, LiClO₄, LiCF₃SO₃, Li(CF₃SO₂)₂N and LiC₄F₉SO₃ or their mixture.

12. (Previously Presented) The method of claim 8, wherein said matrix polymer is any one of polyacrylonitrile, polyvinylidene fluoride, polytetrafluoroethylene, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphazene, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacrylate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, polystyrene or polycarbonate.

13. (Currently Amended) The method of claim 8, wherein said swelling solvent is any one of the following nonaqueous solvent: ethylene carbonate, propylene carbonate, butylene carbonate, γ -butyrolactone, γ -valerolactone, diethoxyethane, tetrahydrofuran, 2-methyltetrahydrofuran, 1,3-dioxane, methyl acetate, methyl propionate, dimethylcarbonate, diethyl carbonate or ethylmethyl carbonate or their mixture.

14. (Previously Presented) The method of claim 7 further comprising inserting said wound electrodes into a film pack.

15. (Previously Presented) The method of claim 14 further comprising subjecting said film pack to heat treatment so that said solid-electrolyte layers formed on said positive electrode and said solid-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer.

16. (Previously Presented) The method of claim 7, wherein said solid-electrolyte layer contains swelling solvent, an electrolyte salt, and matrix polymers and is gelled.

17. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming solid-electrolyte layers on both sides of a positive electrode and a negative electrode, wherein one of said solid-electrolyte layers formed on said positive electrode and one of said solid-electrolyte layers formed on said negative electrode face each other;

winding said positive electrode and said negative electrode; and
subjecting said wound electrodes to heat treatment so that said solid-electrolyte layers
formed on said positive electrode and said solid-electrolyte layers formed on said negative
electrode are integrated with each other into one continuous seamless layer.